

HYS-38CIP sequence listing  
SEQUENCE LISTING

<110> Dedera, Douglas

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Liu, Chenghua

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L

<120> Methods of Therapy and Diagnosis Using Insulin-like Growth Factor Binding Protein-like Polypeptides and Polynucleotides

<130> HYS-38CIP

<140> Not Yet Assigned

<141> 2002-02-27

<150> 09/784,748

<151> 2001-02-14

<150> 09/649,167

<151> 2000-08-23

<150> 09/540,217

<151> 2000-03-31

<160> 14

<170> PatentIn version 3.1

<210> 1

<211> 375

## HYS-38CIP sequence listing

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 1	cgctgcgcct gcgcgctcg cacacgcccc gcgcgcaccc cggcacctg cacaaggcgc	60
gcgacggccc ttgcgagttc gctcctgtgg tcgtcggtcc tccccgaagt gttcacaaacg	120	
tcaccggggc gcaggtgggc ctgtcctgtg aagtgagggc tgtgcctacc ccagtcatca	180	
cgtggagaaa ggtcacgaag tccctgagg gcacccaagc actggaggag ctgcctgggg	240	
accatgtcaa tatacgcttc caagtgcgag gggcccttc tgaccatgag gccacggcct	300	
ggattttgat caacccctg cgaaaggagg atgagggtgt gtaccagtgc catgcagcca	360	
acatggtggg agagg	375	

&lt;210&gt; 2

&lt;211&gt; 473

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 2	aatcctctgt cgacgatttc gtggctgagt cccacagcac agtacgggtt ctagatctga	60
gtaaatacag gagcttcac ttcccagctc ccgatgaccg catgtatgg agaaatgtac	120	
atgttctaag tcattttcag tattttcac ccatgttacg agatatttga ggtggcttat	180	
aagacctgta gaaaaaagaa gaaaaatacg taaatggagg aaaccaggaa aagagcaaaa	240	
gaagagtagg gacatactta gatgagcagt agaatccctg gtatattctg cacacatctc	300	
cctctgagct tcttagcatg caaagacaag agctgtgaac atgaagggtgt gtccatgaga	360	
tgaaaagacc agttgtgttt tggggctgga gggaatattt cctctgtatt cttttagaaa	420	
gagcactgag agaggttagca gacagtgtca ttgtgacagc gtccatgtga aaa	473	

&lt;210&gt; 3

&lt;211&gt; 375

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 3	cgctgcgcct gcgcgctcg cacacgcccc gcgcgcaccc cggcacctg cacaaggcgc	60
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## HYS-38CIP sequence listing

gcgacggccc	ttgcgagttc	gctcctgtgg	tcgtcggtcc	tcccccgaagt	gttcacaacg	120
tcaccggggc	gcaggtgggc	ctgtcctgtg	aagtgagggc	tgtgcctacc	ccagtcata	180
cgtggagaaa	ggtcacgaag	tccctgagg	gcacccaagc	actggaggag	ctgcctgggg	240
accatgtcaa	tatagctgtc	caagtgcgag	ggggcccttc	tgaccatgag	gccacggcct	300
ggatttgtat	caacccctg	cgaaaggagg	atgagggtgt	gtaccagtgc	catgcagcca	360
acatggtggg	agagg					375

&lt;210&gt; 4

&lt;211&gt; 1250

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4

ggcgggagc	ggtgactgct	cgccgggcgc	ggagcggagc	gcgaaggcaga	ggccggcccg	60
ctgtcccgga	gcaagccatg	ccgcgttgc	ctctgctctt	gccgctgctg	cttctgctgc	120
tgcgtccgct	gctgcccggc	ctgtccccga	gccttggat	ccgcacgtg	ggcggtcgcc	180
gccccaaatg	tggtccgtgc	cggccagagg	gctgcccggc	gcctgcgccc	tgcccggcgc	240
ccgggatctc	ggcgtcgac	gagtgcggct	gctgcgccc	ctgcctggga	gccgagggcg	300
cgagctgcgg	gggcccgcgc	ggcgggcgc	gtggcccccgg	cctggtatgc	gcgagccagg	360
ccgcgtggggc	agcgcccgag	ggcacccgggc	tctgcgtgt	cgccacgcgc	ggcacccgtct	420
gcggctccga	cggtcgctcg	taccccgacg	tctgcgcgt	gcccgcgc	gctcggcaca	480
cgcggccgc	gcaccccggt	cacctgcaca	aggcgcgcga	cggcccttgc	gagttcggttc	540
ctatcactcg	tttttataac	tgctttcctc	agccgttaat	tcacaggcaa	ttctctttgt	600
ctccagacag	gagacagagt	gagaccctgt	ctaaaaagaa	gaagaagaag	gaggaggagg	660
aggaggagga	ggaggagggg	gaggaggaga	aggaagaaga	aggatgcata	agcaatttcc	720
aacacaccat	taactttaaa	gaaatctcag	agggatttgg	gaagattttt	tcattccagc	780
catcaatgtat	cgtatataatt	gacgaggcct	ctacactgca	cgttgcctaa	cacgctgtgg	840
tgctggatgc	cagggtggct	gagttgtgt	ccaatgcagc	tcctgtggtc	gtcggttc	900
cccgaagtgt	tcacaacgtc	accggggcgc	aggggcct	gtcctgtgaa	gtgagggctg	960
tgcctacccc	agtcatcact	tggagaaagg	tcacgaagtc	ccctgaggc	acccaagcac	1020
tggaggagct	gcctggggac	catgtcaata	tagctgtcca	agtgcgaggg	ggcccttctg	1080
accatgaggc	cacggcctgg	atttgggtgt	cagacctgca	tcattgtctg	aaggctctcc	1140
ccacctactc	ctactccagc	accctttctc	cttcacaggt	gtttctccta	atacatctct	1200

## HYS-38CIP sequence listing

tgcacattgg accctatcct ggtgcctgca tcttggaggc cccaccctag 1250

&lt;210&gt; 5

&lt;211&gt; 1009

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (79)..(915)

&lt;223&gt;

<400> 5		
ggggcgggag cggtaactgc tcggcggcg cggagcggag cgcaagcag aggccgc 60		
gctgtcccg agcaagcc atg ccg cgc ttg tct ctg ctc ttg ccg ctg ctg 111		
Met Pro Arg Leu Ser Leu Leu Leu Pro Leu Leu		
1 5 10		
ctt ctg ctg ctg ccg ctg ctg ccg ccg ctg tcc ccg agc ctc ggg 159		
Leu Leu Leu Leu Pro Leu Leu Pro Pro Leu Ser Pro Ser Leu Gly 15 20 25		
atc cgc gac gtg ggc ggc cgg cgc ccc aag tgt ggt ccg tgc cgg cca 207		
Ile Arg Asp Val Gly Gly Arg Arg Pro Lys Cys Gly Pro Cys Arg Pro 30 35 40		
gag ggc tgc ccg gcg cct gcg ccc tgc ccg gcg ccc ggg atc tcg gcg 255		
Glu Cys Pro Ala Pro Ala Pro Cys Pro Ala Pro Gly Ile Ser Ala 45 50 55		
ctc gac gag tgc ggc tgc tgc gcc cgc tgc ctg gga gcc gag ggc gcg 303		
Leu Asp Glu Cys Gly Cys Cys Ala Arg Cys Leu Gly Ala Glu Gly Ala 60 65 70 75		
agc tgc ggg ggc cgc gcc ggc cgg cgc tgc ggc ccc ggc ctg gta tgc 351		
Ser Cys Gly Gly Arg Ala Gly Gly Arg Cys Gly Pro Gly Leu Val Cys 80 85 90		
gcg agc cag gcc gct ggg gca gcg ccc gag ggc acc ggg ctc tgc gtg 399		
Ala Ser Gln Ala Ala Gly Ala Ala Pro Glu Gly Thr Gly Leu Cys Val 95 100 105		
tgc gcg cag cgc ggc acc gtc tgc ggc tcc gac ggt cgc tgc tac ccc 447		
Cys Ala Gln Arg Gly Thr Val Cys Gly Ser Asp Gly Arg Ser Tyr Pro 110 115 120		
agc gtc tgc gcg ctg cgc ctg cgc gct cgg cac acg ccc cgc gcg cac 495		
Ser Val Cys Ala Leu Arg Leu Arg Ala Arg His Thr Pro Arg Ala His 125 130 135		

## HYS-38CIP sequence listing

ccc ggt cac ctg cac aag gcg cgc gac ggc cct tgc gag ttc gct cct	543
Pro Gly His Leu His Lys Ala Arg Asp Gly Pro Cys Glu Phe Ala Pro	
140 145 150 155	
gtg gtc gtc gtt cct ccc cga agt gtt cac aac gtc acc ggg gcg cag	591
Val Val Val Val Pro Pro Arg Ser Val His Asn Val Thr Gly Ala Gln	
160 165 170	
gtg ggc ctg tcc tgt gaa gtc agg gct gtc cct acc cca gtc atc acg	639
Val Gly Leu Ser Cys Glu Val Arg Ala Val Pro Thr Pro Val Ile Thr	
175 180 185	
tgg aga aag gtc acg aag tcc cct gag ggc acc caa gca ctg gag gag	687
Trp Arg Lys Val Thr Lys Ser Pro Glu Gly Thr Gln Ala Leu Glu Glu	
190 195 200	
ctg cct ggg gac cat gtc aat ata gct gtc caa gtc cga ggg ggc cct	735
Leu Pro Gly Asp His Val Asn Ile Ala Val Gln Val Arg Gly Gly Pro	
205 210 215	
tct gac cat gag gcc acg gcc tgg att ttg atc aac ccc ctg cga aag	783
Ser Asp His Glu Ala Thr Ala Trp Ile Leu Ile Asn Pro Leu Arg Lys	
220 225 230 235	
gag gat gag ggt gtc tac cag tgc cat gca gcc aac atg gtc gga gag	831
Glu Asp Glu Gly Val Tyr Gln Cys His Ala Ala Asn Met Val Gly Glu	
240 245 250	
gct gag tcc cac agc aca gtc acg gtt cta gat ctg agt aaa tac agg	879
Ala Glu Ser His Ser Thr Val Thr Val Leu Asp Leu Ser Lys Tyr Arg	
255 260 265	
agc ttc cac ttc cca gct ccc gat gac cgc atg tga tggagaaatg	925
Ser Phe His Phe Pro Ala Pro Asp Asp Arg Met	
270 275	
tacatgttct aagtcatttt cagtattta cacccatgtt atgagatatt tgaggtggct	985
tataagacct gtaaaaaaaa aaaa	1009

&lt;210&gt; 6

&lt;211&gt; 278

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6

Met Pro Arg Leu Ser Leu Leu Leu Pro Leu Leu Leu Leu Leu Leu	
1 5 10 15	

Pro Leu Leu Pro Pro Leu Ser Pro Ser Leu Gly Ile Arg Asp Val Gly	
20 25 30	

Gly Arg Arg Pro Lys Cys Gly Pro Cys Arg Pro Glu Gly Cys Pro Ala	
35 40 45	

HYS-38CIP sequence listing

Pro Ala Pro Cys Pro Ala Pro Gly Ile Ser Ala Leu Asp Glu Cys Gly  
50 55 60

Cys Cys Ala Arg Cys Leu Gly Ala Glu Gly Ala Ser Cys Gly Gly Arg  
65 70 75 80

Ala Gly Gly Arg Cys Gly Pro Gly Leu Val Cys Ala Ser Gln Ala Ala  
85 90 95

Gly Ala Ala Pro Glu Gly Thr Gly Leu Cys Val Cys Ala Gln Arg Gly  
100 105 110

Thr Val Cys Gly Ser Asp Gly Arg Ser Tyr Pro Ser Val Cys Ala Leu  
115 120 125

Arg Leu Arg Ala Arg His Thr Pro Arg Ala His Pro Gly His Leu His  
130 135 140

Lys Ala Arg Asp Gly Pro Cys Glu Phe Ala Pro Val Val Val Val Pro  
145 150 155 160

Pro Arg Ser Val His Asn Val Thr Gly Ala Gln Val Gly Leu Ser Cys  
165 170 175

Glu Val Arg Ala Val Pro Thr Pro Val Ile Thr Trp Arg Lys Val Thr  
180 185 190

Lys Ser Pro Glu Gly Thr Gln Ala Leu Glu Glu Leu Pro Gly Asp His  
195 200 205

Val Asn Ile Ala Val Gln Val Arg Gly Gly Pro Ser Asp His Glu Ala  
210 215 220

Thr Ala Trp Ile Leu Ile Asn Pro Leu Arg Lys Glu Asp Glu Gly Val  
225 230 235 240

Tyr Gln Cys His Ala Ala Asn Met Val Gly Glu Ala Glu Ser His Ser  
245 250 255

Thr Val Thr Val Leu Asp Leu Ser Lys Tyr Arg Ser Phe His Phe Pro  
260 265 270

Ala Pro Asp Asp Arg Met  
275

HYS-38CIP sequence listing

<211> 837

<212> DNA

<213> Homo sapiens

<400> 7  
atgcccgcgt tgtctctgct cttgccgctg ctgcttctgc tgctgctgcc gctgctgccg 60  
ccgctgtccc cgagcctcgg gatccgcac gtggccggcc ggcgccccaa gtgtggccg 120  
tgccggccag agggctgccc ggcgcctgcg ccctgcccgg cgcccgggat ctcggcgctc 180  
gacgagtgcg gctgctgcgc ccgcgcctg ggagccgagg gcgcgagctg cggggccgc 240  
gccggcgggc gctgtggccc cggcctggta tgcgcgagcc aggccgctgg ggcagcgc 300  
gagggcaccg ggctctgcgt gtgcgcgcag cgccgcaccg tctgcggctc cgacggctgc 360  
tcgtacccca gctgtgcgc gctgcgcctg cgccgcctgc acacgcggcc cgccgcaccc 420  
ggtcacctgc acaaggcgcg cgacggccct tgcgagttcg ctccgtgtgt cgtcgttcct 480  
ccccgaagtg ttcacaacgt caccggggcg caggtgggcc tgtccctgtga agtgagggct 540  
gtgcctaccc cagtcatcac gtggagaaag gtcacgaagt cccctgaggg caccgaagca 600  
ctggaggagc tgcctggga ccatgtcaat atagctgtcc aagtgcgagg gggcccttct 660  
gaccatgagg ccacggcctg gatttgatc aacccctgc gaaaggagga tgagggtgtg 720  
taccagtgcc atgcagccaa catggtgggaa gaggctgagt cccacagcac agtgcacggtt 780  
ctagatctga gtaaatacag gagcttccac ttcccagctc ccgatgaccg catgtga 837

<210> 8

<211> 16

<212> PRT

<213> Homo sapiens

<400> 8

Asp Glu Cys Gly Cys Cys Ala Arg Cys Leu Gly Ala Glu Gly Ala Ser  
1 5 10 15

<210> 9

<211> 27

<212> PRT

<213> Homo sapiens

## HYS-38CIP sequence listing

&lt;400&gt; 9

Met	Pro	Arg	Leu	Ser	Leu	Leu	Leu	Pro	Leu	Leu	Leu	Leu	Leu	Leu
1				5				10					15	

Pro	Leu	Leu	Pro	Pro	Leu	Ser	Pro	Ser	Leu	Gly
			20				25			

&lt;210&gt; 10

&lt;211&gt; 251

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 10

Ile	Arg	Asp	Val	Gly	Gly	Arg	Arg	Pro	Lys	Cys	Gly	Pro	Cys	Arg	Pro
1				5				10				15			

Glu	Gly	Cys	Pro	Ala	Pro	Ala	Pro	Cys	Pro	Ala	Pro	Gly	Ile	Ser	Ala
					20		25					30			

Leu	Asp	Glu	Cys	Gly	Cys	Cys	Ala	Arg	Cys	Leu	Gly	Ile	Glu	Gly	Ala
					35		40				45				

Ser	Cys	Gly	Gly	Arg	Ala	Gly	Gly	Arg	Cys	Gly	Pro	Gly	Leu	Val	Cys
						50	55				60				

Ala	Ser	Gln	Ala	Ala	Gly	Ala	Ala	Pro	Glu	Gly	Thr	Gly	Leu	Cys	Val
65					70			75			80				

Cys	Ala	Gln	Arg	Gly	Thr	Val	Cys	Gly	Ser	Asp	Gly	Arg	Ser	Tyr	Pro
					85		90				95				

Ser	Val	Cys	Ala	Leu	Arg	Leu	Arg	Ala	Arg	His	Thr	Pro	Arg	Ala	His
					100		105				110				

Pro	Gly	His	Leu	His	Lys	Ala	Arg	Asp	Gly	Pro	Cys	Glu	Phe	Ala	Pro
						115		120			125				

Val	Val	Val	Val	Pro	Pro	Arg	Ser	Val	His	Asn	Val	Thr	Gly	Ala	Gln
						130		135			140				

Val	Gly	Leu	Ser	Cys	Glu	Val	Arg	Ala	Val	Pro	Thr	Pro	Val	Ile	Thr
145					150		155				160				

## HYS-38CIP sequence listing

Trp Arg Lys Val Thr Lys Ser Pro Glu Gly Thr Gln Ala Leu Glu Glu  
 165 170 175

Leu Pro Gly Asp His Val Asn Ile Ala Val Gln Val Arg Gly Gly Pro  
 180 185 190

Ser Asp His Glu Ala Thr Ala Trp Ile Leu Ile Asn Pro Leu Arg Lys  
 195 200 205

Glu Asp Glu Gly Val Tyr Gln Cys His Ala Ala Asn Met Val Gly Glu  
 210 215 220

Ala Glu Ser His Ser Thr Val Thr Val Leu Asp Leu Ser Lys Tyr Arg  
 225 230 235 240

Ser Phe His Phe Pro Ala Pro Asp Asp Arg Met  
 245 250

<210> 11

<211> 103

<212> PRT

<213> Homo sapiens

<400> 11

Ala Arg Asp Gly Pro Cys Glu Phe Ala Pro Val Val Val Val Pro Pro  
 1 5 10 15

Arg Ser Val His Asn Val Thr Gly Ala Gln Val Gly Leu Ser Cys Glu  
 20 25 30

Val Arg Ala Val Pro Thr Pro Val Ile Thr Trp Arg Lys Val Thr Lys  
 35 40 45

Ser Pro Glu Gly Thr Gln Ala Leu Glu Glu Leu Pro Gly Asp His Val  
 50 55 60

Asn Ile Ala Val Gln Val Arg Gly Gly Pro Ser Asp His Glu Ala Thr  
 65 70 75 80

Ala Trp Ile Leu Ile Asn Pro Leu Arg Lys Glu Asp Glu Gly Val Tyr  
 85 90 95

Gln Cys His Ala Ala Asn Met  
 100

## HYS-38CIP sequence listing

&lt;210&gt; 12

&lt;211&gt; 390

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 12

Met	Pro	Arg	Leu	Ser	Leu	Leu	Leu	Pro	Leu	Leu	Leu	Leu	Leu	Leu
1				5				10					15	

Pro	Leu	Leu	Pro	Pro	Leu	Ser	Pro	Ser	Leu	Gly	Ile	Arg	Asp	Val	Gly
					20			25				30			

Gly	Arg	Arg	Pro	Lys	Cys	Gly	Pro	Cys	Arg	Pro	Glu	Gly	Cys	Pro	Ala
					35			40			45				

Pro	Ala	Pro	Cys	Pro	Ala	Pro	Gly	Ile	Ser	Ala	Leu	Asp	Glu	Cys	Gly
					50			55			60				

Cys	Cys	Ala	Arg	Cys	Leu	Gly	Ala	Glu	Gly	Ala	Ser	Cys	Gly	Gly	Arg
					65			70			75			80	

Ala	Gly	Gly	Arg	Cys	Gly	Pro	Gly	Leu	Val	Cys	Ala	Ser	Gln	Ala	Ala
					85			90			95				

Gly	Ala	Ala	Pro	Glu	Gly	Thr	Gly	Leu	Cys	Val	Cys	Ala	Gln	Arg	Gly
					100			105			110				

Thr	Val	Cys	Gly	Ser	Asp	Gly	Arg	Ser	Tyr	Pro	Ser	Val	Cys	Ala	Leu
		115				120					125				

Arg	Leu	Arg	Ala	Arg	His	Thr	Pro	Arg	Ala	His	Pro	Gly	His	Leu	His
					130			135			140				

Lys	Ala	Arg	Asp	Gly	Pro	Cys	Glu	Phe	Val	Pro	Ile	Thr	Arg	Phe	Tyr
					145			150			155			160	

Asn	Cys	Phe	Pro	Gln	Pro	Leu	Ile	His	Arg	Gln	Phe	Ser	Leu	Ser	Pro
					165			170			175				

Asp	Arg	Arg	Gln	Ser	Glu	Thr	Leu	Ser	Lys	Lys	Lys	Lys	Lys	Glu	
					180			185			190				

Glu	Glu	Glu	Glu	Glu	Glu	Gly	Glu	Glu	Glu	Lys	Glu	Glu	Glu	Glu	

195

HYS-38CIP sequence listing  
200  
205Gly Cys Lys Ser Asn Phe Gln His Thr Ile Asn Phe Lys Glu Ile Ser  
210 215 220Glu Gly Phe Gly Lys Ile Phe Ser Phe Gln Pro Ser Met Ile Asp Ile  
225 230 235 240Ile Asp Glu Ala Ser Thr Leu His Val Ala Gln His Ala Val Val Leu  
245 250 255Asp Ala Arg Val Ala Glu Leu Leu Ser Asn Ala Ala Pro Val Val Val  
260 265 270Val Pro Pro Arg Ser Val His Asn Val Thr Gly Ala Gln Val Gly Leu  
275 280 285Ser Cys Glu Val Arg Ala Val Pro Thr Pro Val Ile Thr Trp Arg Lys  
290 295 300Val Thr Lys Ser Pro Glu Gly Thr Gln Ala Leu Glu Glu Leu Pro Gly  
305 310 315 320Asp His Val Asn Ile Ala Val Gln Val Arg Gly Gly Pro Ser Asp His  
325 330 335Glu Ala Thr Ala Trp Ile Leu Val Ser Asp Leu His His Cys Leu Lys  
340 345 350Ala Leu Pro Thr Tyr Ser Tyr Ser Ser Thr Leu Ser Pro Ser Gln Val  
355 360 365Phe Leu Leu Ile His Leu Leu His Ile Gly Pro Tyr Pro Gly Ala Cys  
370 375 380Ile Leu Glu Ala Pro Pro  
385 390

&lt;210&gt; 13

&lt;211&gt; 268

&lt;212&gt; PRT

&lt;213&gt; Mus musculus

&lt;400&gt; 13

## HYS-38CIP sequence listing

Met Pro Arg Leu Pro Leu Leu Leu Leu Leu Pro Ser Leu Ala Arg  
 1 5 10 15

Gly Leu Gly Leu Arg Asp Ala Gly Arg Arg His Pro Glu Cys Ser Pro  
 20 25 30

Cys Gln Gln Asp Arg Cys Pro Ala Pro Ser Pro Cys Pro Ala Pro Trp  
 35 40 45

Ile Ser Ala Arg Asp Glu Cys Gly Cys Cys Ala Arg Cys Leu Gly Ala  
 50 55 60

Glu Gly Ala Ser Cys Gly Gly Pro Val Gly Ser Arg Cys Gly Pro Gly  
 65 70 75 80

Leu Val Cys Ala Ser Arg Ala Ser Gly Thr Ala Pro Glu Gly Thr Gly  
 85 90 95

Leu Cys Val Cys Ala Gln Arg Gly Ala Val Cys Gly Ser Asp Gly Arg  
 100 105 110

Ser Tyr Ser Ser Ile Cys Ala Leu Arg Leu Arg Ala Arg His Ala Pro  
 115 120 125

Arg Ala His His Gly His Leu His Lys Ala Arg Asp Gly Pro Cys Glu  
 130 135 140

Phe Ala Pro Val Val Leu Met Pro Pro Arg Asp Ile His Asn Val Thr  
 145 150 155 160

Gly Thr Gln Val Phe Leu Ser Cys Glu Val Lys Ala Val Pro Thr Pro  
 165 170 175

Val Ile Thr Trp Lys Lys Val Lys His Ser Pro Glu Gly Thr Glu Gly  
 180 185 190

Leu Glu Glu Leu Pro Gly Asp His Val Asn Ile Ala Val Gln Val Arg  
 195 200 205

Gly Gly Pro Ser Asp His Glu Thr Thr Ser Trp Ile Leu Ile Asn Pro  
 210 215 220

Leu Arg Lys Glu Asp Glu Gly Val Tyr His Cys His Ala Ala Asn Ala  
 225 230 235 240

Ile Gly Glu Ala Gln Ser His Gly Thr Val Thr Val Leu Asp Leu Asn  
 245 250 255

## HYS-38CIP sequence listing

Arg Tyr Lys Ser Leu Tyr Ser Ser Val Pro Gly Asp  
 260 265

<210> 14

<211> 264

<212> PRT

<213> Homo sapiens

<400> 14

Pro Ser Leu Arg Ala Leu Leu Leu Gly Ala Ala Gly Leu Leu Leu Leu  
 1 5 10 15

Leu Leu Pro Leu Ser Ser Ser Ser Ser Asp Thr Cys Gly Pro Cys  
 20 25 30

Glu Pro Ala Ser Cys Pro Pro Leu Pro Pro Leu Gly Cys Leu Leu Gly  
 35 40 45

Glu Thr Arg Asp Ala Cys Gly Cys Cys Pro Met Cys Ala Arg Gly Glu  
 50 55 60

Gly Glu Pro Cys Gly Gly Gly Ala Gly Arg Gly Tyr Cys Ala Pro  
 65 70 75 80

Gly Met Glu Cys Val Lys Ser Arg Lys Arg Arg Lys Gly Lys Ala Gly  
 85 90 95

Ala Ala Ala Gly Gly Pro Gly Val Ser Gly Val Cys Val Cys Lys Ser  
 100 105 110

Arg Tyr Pro Val Cys Gly Ser Asp Gly Thr Thr Tyr Pro Ser Gly Cys  
 115 120 125

Gln Leu Arg Ala Ala Ser Gln Arg Ala Glu Ser Arg Gly Glu Lys Ala  
 130 135 140

Ile Thr Gln Val Ser Lys Gly Thr Cys Glu Gln Gly Pro Ser Ile Val  
 145 150 155 160

Thr Pro Pro Lys Asp Ile Trp Asn Val Thr Gly Ala Gln Val Tyr Leu  
 165 170 175

Ser Cys Glu Val Ile Gly Ile Pro Thr Pro Val Leu Ile Trp Asn Lys  
 180 185 190

## HYS-38CIP sequence listing

Val Lys Arg Gly His Tyr Gly Val Gln Arg Thr Glu Leu Leu Pro Gly  
195 200

Asp Arg Asp Asn Leu Ala Ile Gln Thr Arg Gly Gly Pro Glu Lys His  
210 215 220

Glu Val Thr Gly Trp Val Leu Val Ser Pro Leu Ser Lys Glu Asp Ala  
225 230 235 240

Gly Glu Tyr Glu Cys His Ala Ser Asn Phe Gln Gly Gln Ala Ser Ala  
245 250 255

Ser Ala Lys Ile Thr Val Val Asp  
260